KV-M16D BM-658

SERVICE MANUAL

AEP Model
Chassis No. SCC-B66E-A



BE-1 CHASSIS

Note: The service manual for RM-658 has been issued separately.

MODELS OF TH	E SAME SERIES
KV-M16D	
KV-M19D/M19TD	
KV-M14D	

SPECIFICATIONS CCIR B, G and H

Television system

Color system

Channel coverage

PAL SECAM VHF E2-S20

UHF E21 - E69

Picture tube

Trinitron tube 90° degree deflection

Approx. 40.1cm (16 inches)

(Approx. 37.3 cm picture measured

diagonally)

Input

21 - pin connector : CENELEC

standard AV connector

Output

Earphone jack : minijack 21 - pin

connector: CENELEC standard

Power consumption

53Wh

Dimensions

Approx. $389 \times 374 \times 413$ mm

(W/H/D)

Weight

Approx. 12.8kg

Supplied accessories

RM - 658 Remote Commander (1)

IEC designation R6 batteries (2)

Sound output

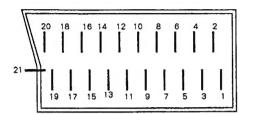
3.5w (music power)

Design and specifications are subject to change without notice.





21-pin Euro Connector Configuration



PIN	SIGNAL	SPECIFICATION
1	Audio output	0.5Vrms/1kilohm or less
2	Audio input	0.5Vrms/10kilohms or more
3	Audio output	0.5Vrms/1kilohm or less
4	Earth (audio)	
5	Earth (B-input)	
6	Audio input	0.5Vrms/10kilohms or more
7	B-input	0.7Vp-p/75ohms
8	Function switching	9.5V to 12V
9	Earth (G-input)	
10		
11	G-input	0.7Vp-p/75ohms
12		
13	Earth (R-input)	
14	Earth (blanking)	
15	R-input	0.7Vp-p/75ohms
16	Fast blanking	1V to 3V/75ohms
17	Earth (video)	
18	Earth (fast blanking)	
19	Video output	1Vp-p/75ohms
20	Video input	1Vp-p/75ohms
21	Screening plug	

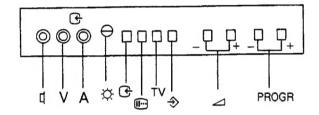
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SECTION 1 GENERAL

1-1, FUNCTION OF CONTROLS



On the set

On-screen display

Indicates program numbers and input mode; .

Press the button to make the display appear on the screen, and again to make it disappear. See also "On the Remote Commander" below.

Bar display

Indicates the level of the user controls when they are adjusted; \triangle volume, \bigcirc contrast or \bigcirc color.

① power switch

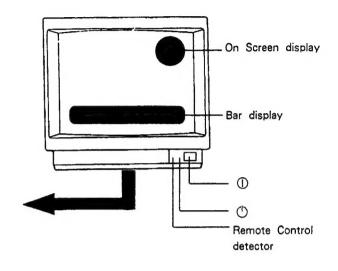
To cut off the mains electricity supply, press this switch. Ensure correct operation by pressing the switch fully.

Remote control detector

Point the Remote Commander towards this detector.

standby indicator

Lights up brightly when the set is in standby mode.



Inside the panel

arphone jack (minijack mono)

nreset button

m analogue select buttons

Press m repeatedly until the on-screen display of the required adjustment appears (\triangle volume, m contrast or m color). Adjust by using the \triangle + or - buttons.

G input button

Press this button to view the input picture coming in through the 21-pin connector or the connectors on the front panel. "C" appears on the screen. Press c again or PROGR + / - to return to the TV mode.

Extra equipment can be connected to the TV using both the 21-pin connector and the input connectors, but only one piece of equipment besides the TV should be turned on at one time.

prightness control

Turn clockwise for more brightness or anticlockwise for less.

∠ Volume adjustment buttons +/-

Use these buttons to adjust the volume to the desidered level.

PROGR +/- buttons

Use to scan the available channels. To turn on the TV from standby mode without using the remote commander, press any of these buttons.

G Video/Audio input connectors (phono)

Connect to a VTR, micro-computer, etc.

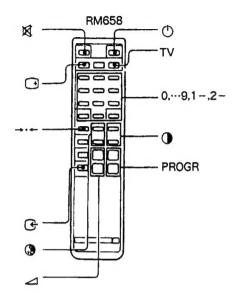
o V (Yellow) video input

o A (Black) audio input (mono)

Note

The TV button does not function on this set.

1-2. ON THE REMOTE COMMANDER



To operate the Commander, point it toward the remote control detector.

M mute button

Use to mute the sound. Press \triangle + or $mathbb{M}$ to restore the sound.

0,9, 1-, 2-buttons

To select:

program 15, press 1 - and 5, program 25, press 2 - and 5.

→ · ← normal button

Press to return color and contrast to factory-set levels.

() standby button

Press to select standby mode. Use this facility to turn off the set for short periods of time.

To return to TV mode, press TV or the program number on the Remote Commander; there will be a slight delay before the picture is restored. If the main power is turned off when in standby mode, the indicator will take 2 to 6 seconds to go off.

1-3. TO PRESET CHANNELS

Use the buttons inside the Panel. To open the panel, push and pull the centre.

Manual Programming

To Tune in a Channel in Any Desired Program Position

- 1 Press (preset) to select the presetting mode.
- Select the desired program position by using the PROGR + or - button.
- 3 Press \(\sum + \text{ or } \text{ repeatedly until the TV program of the desired channel appears.} \)
 Repeat steps 2 and 3 for all desired channels.
- 4 Press \$\times\$ again to return to the TV mode.

On-screen display button

Indicate the program number and the input mode. Press this button to make the display appear on the screen, and press the button again to make it disappear.

TV button

Press to change to the TV mode from standby, 🕒 input modes.

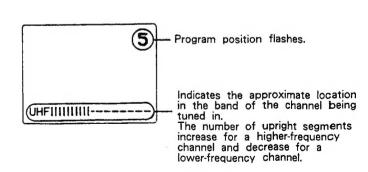
PROGR+/- buttons

Use to scan the available channels.

- ∠ +/- volume buttons
- 3 color buttons
- O contrast buttons

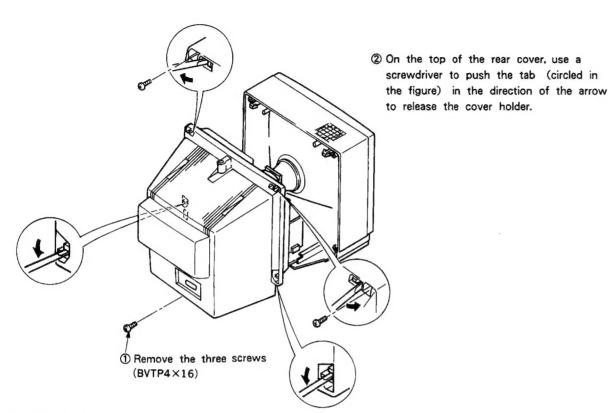
G input button

Press to view the input picture from the connector or connectors. "C" appears on the screen. Press PROGR +/- or a program number key to return to the TV mode.

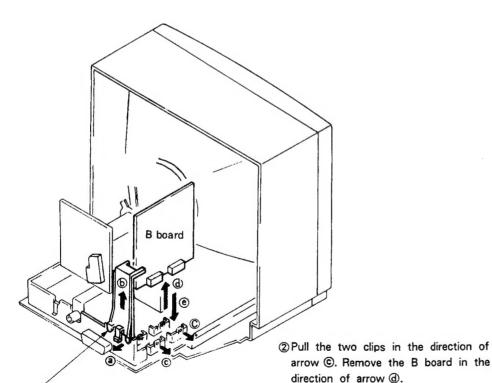


SECTION 2 DISASSEMBLY

2-1. REAR COVER REMOVAL



2-2. B BOARD REMOVAL



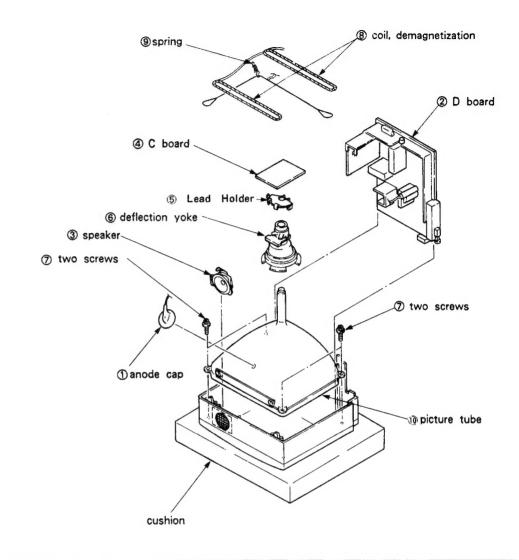
① Pull the clips in the direction of arrow ②. Remove the B bracet in the direction of

-5-

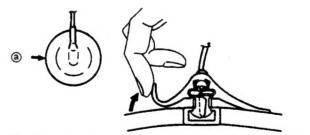
arrow (b).

3 Install the B board in the direction of arrow @.

2-3. PICTURE TUBE REMOVAL

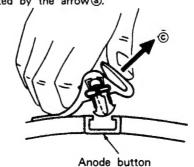


Removing Procedures



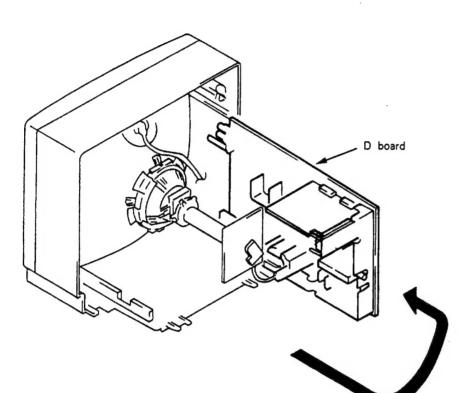
1) Turn up one side of the rubber cap in the direction

indicated by the arrow @.



- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow (b).
- When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow.





KV-M16D RM-658 KV-M16D RM-658

SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed,
- These adjustments should be performed with rated power supply voltage unless otherwise noted,

The control and switch below should be set as follows unless otherwise noted:

◆ CONTRAST control 80% (or Normal by Commander)

☆BRIGHTNESS control 50%

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. White Balance

Note: Test Equipment Required.

- 1. Color Bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

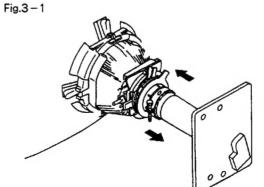
Preparation

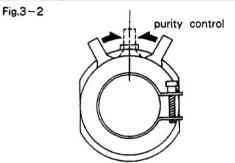
- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

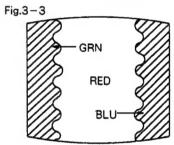
3-1. BEAM LANDING

- 1. Input a raster signal with the pattern generator.

 CONTRAST | normal |
- 2. Turn the raster signal of the pattern generator to red.
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly.
 (Fig. 3 - 1 to 3 - 3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes red.(Fig. 3 1)
- Switch over the raster signal to blue and green and confirm the condition.
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corners is not right, adjust by using the magnet. (Fig. 3 4)

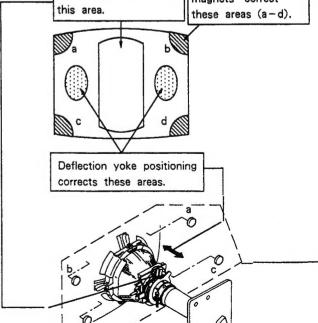






Purity control corrects
this area.

Disk magnets or rotatable disk magnets correct these areas (a - d

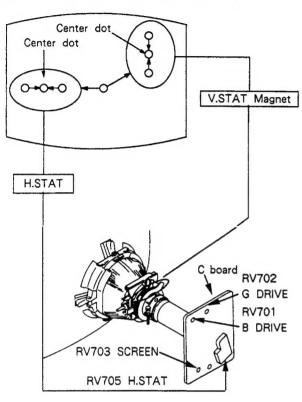


-7-

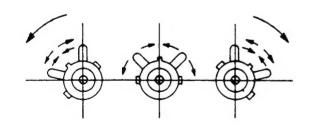
3-2. CONVERGENCE

Preparation:

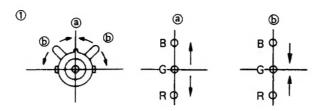
- Before starting, perform FOCUS, H. SIZE and V. SIZE
- Set BRIGHTNESS control to minimum.
- · Feed in the dot pattern.
- (1) Horizontal and Vertical Static Convergence

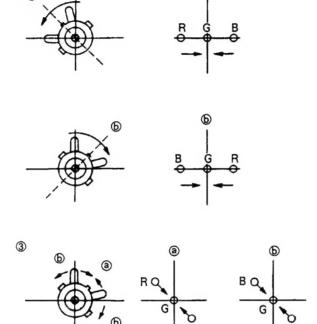


- 1. Adjust H, STAT VR to coincide red, green and blue dots on the center of screen.(Horizontal movement)
- 2. Adjust V, STAT magnet to coincide red, green and blue dots on the center of screen.(Vertical movement)
- 3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



4. When the V. STAT magnet is moved in the direction of arrow @ and b, red, green and blue dots move as shown below.



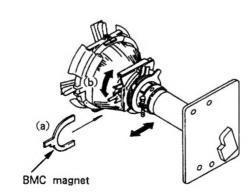


If the red and blue dots do not coincide with green dot, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

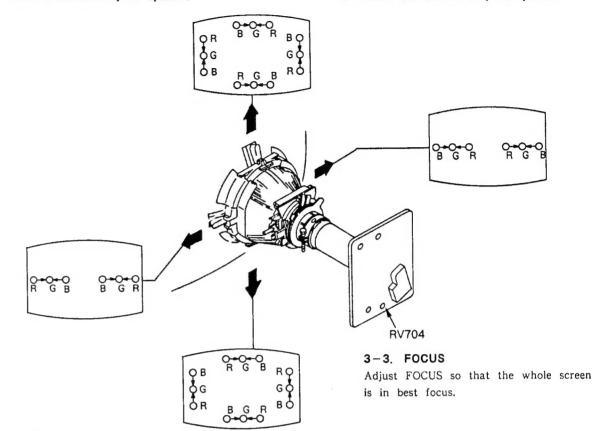


(2) Dynamic Convergence Adjustment

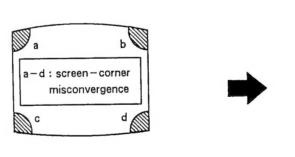
Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment...
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- 3. Move the deflection yoke for best convergence as shown
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.



(3) Screen-corner Convergence



Affix a permalloy ass'y corresponding to the misconverged areas. Permalloy.

3-4. WHITE BALANCE

(Screen (G2) Setting)

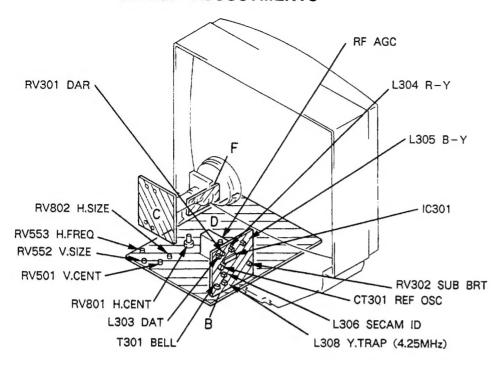
- 1. Input dot signals from the pattern generator.
- Apply 140 V DC to the cathodes of R, G, and B from an external power source.
- (RV703) immediately before the fly-back line disappears. specified,

(White Balance Adjustment)

- 1. Input all-white signals from the pattern generator.
- 2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
- 2. Set the picture BRIGHTNESS control to the minimum 3. Adjust the white balance using RV701 (B DRIVE) and RV702 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and 4. While watching the picture, adjust the G2 volume BRIGHTNESS controls are set to normal unless otherwise

SECTION 4 CIRCUIT ADJUSTMENTS



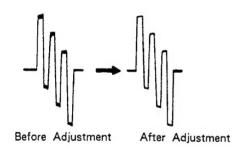
4-1. B BOARD ADJUSTMENTS

REF OSC Adjustment (CT301)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin @ of IC301 and ground.
- 3. Adjust CT301 to obtain color synchronization.
- 4. Remove the jumper wire from IC301.

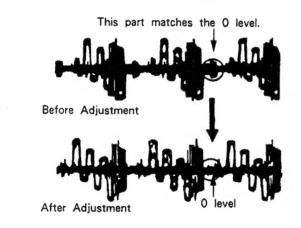
1H DELAY LINE Adjustment (L303 DAT, RV301 DAR)

- 1. Input a PAL COLOR BAR pattern.
- 2. Connect the oscilloscope to pin ③ (B-Y) of IC301 and observe the waveform of the H block on the oscilloscope.
- 3. Adjust L303 to minimize the double waveform outline.



4. Input a PAL TEST COLOR BAR pattern.

5. Rotate the RV301 VR and adjust till the ANT PAL part of the waveform matches the 0 level.



6. L303 and RV301 affect each other, so repeat till the conditions of both are met,

Y TRAP 4.25 MHz ADJUSTMENT (L308)

- 1. Input a SECAM COLOR BAR pattern.
- Connect pin of IC302 to the oscilloscope and adjust L308 so that the waveform level becomes minimum.

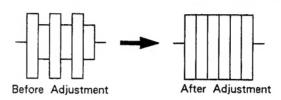


SECAM ID Adjustment (L306)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect a Digital Multimeter at pin @ of IC301.
- Adjust L306 so that the indicator goes up to the maximum.

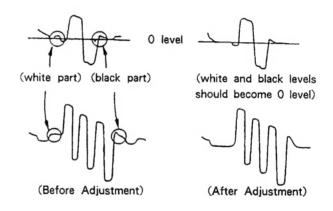
BELL FILTER Adjustment (T301)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to the Q302 emitter.
- 3. Adjust T301 so that the waveform becomes flat.



SECAM DISCRI Adjustment (L304 R-Y L305 B-Y)

- I. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to pin (1) of IC301.
- 3. Adjust L304 (R-Y) so that white and black parts of the waveform of pin ① becomes 0 level.
- 4. Connect an oscilloscope to pin 3 of IC301.
- 5. Adjust L305 (B-Y) so that white and black parts of the waveform of pin 3 becomes 0 level.



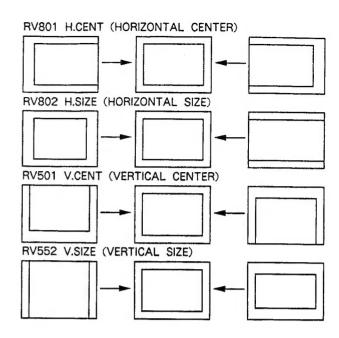
SUB BRT Adjustment (RV302)

- 1. Input a PAL COLOR BAR signal.
- Set CONTRAST and COLOR volume to a minimum, and set the BRIGHTNESS volume control to the mechanical center.
- Slowly rotate SUB BRT (RV302) until the red portion is faintly illuminated.

4-2, D BOARD ADJUSTMENTS

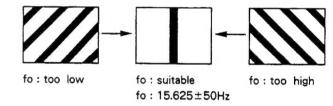
TU AGC (RF AGC)

- 1. Tune in air signals.
- Adjust AGC VR (RF AGC) so that snow-noise and cross-modulation just disappear from the picture.



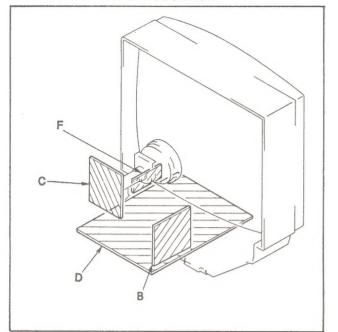
H. FREQ (RV553)

- 1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100 μ /16V) between Pin 5 and GND of IC551.
- Adjust RV553 (H. FREQ) to stop scrolling of the picture in the horizontal direction.
- 3. After adjustment, remove the electrolytic capacitor.



SECTION 5 DIAGRAM

5-1. CIRCUIT BOARDS LOCATION



Note:

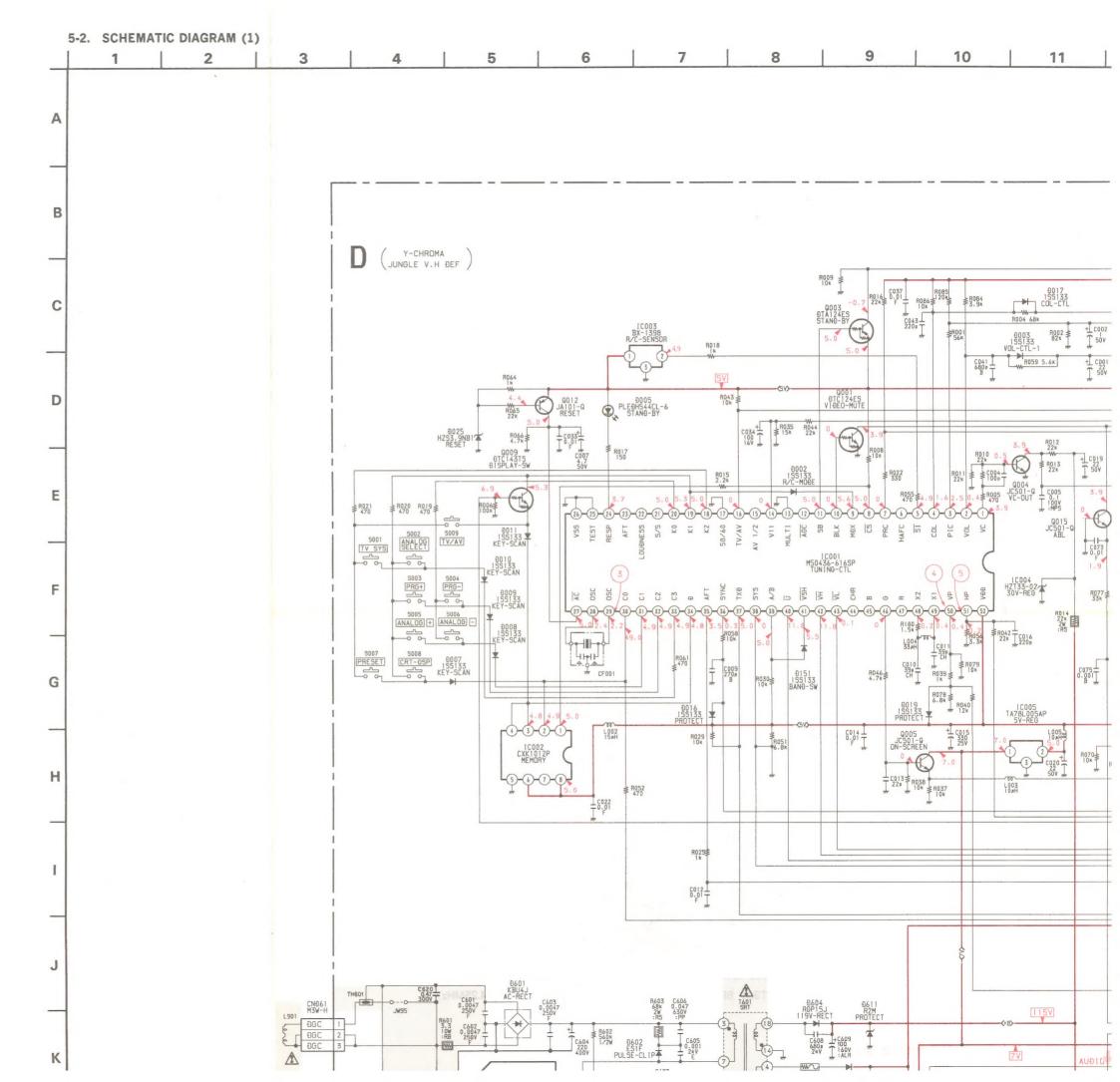
- All capacitors are in μ F unless otherwise noted.pF: μμ F
 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

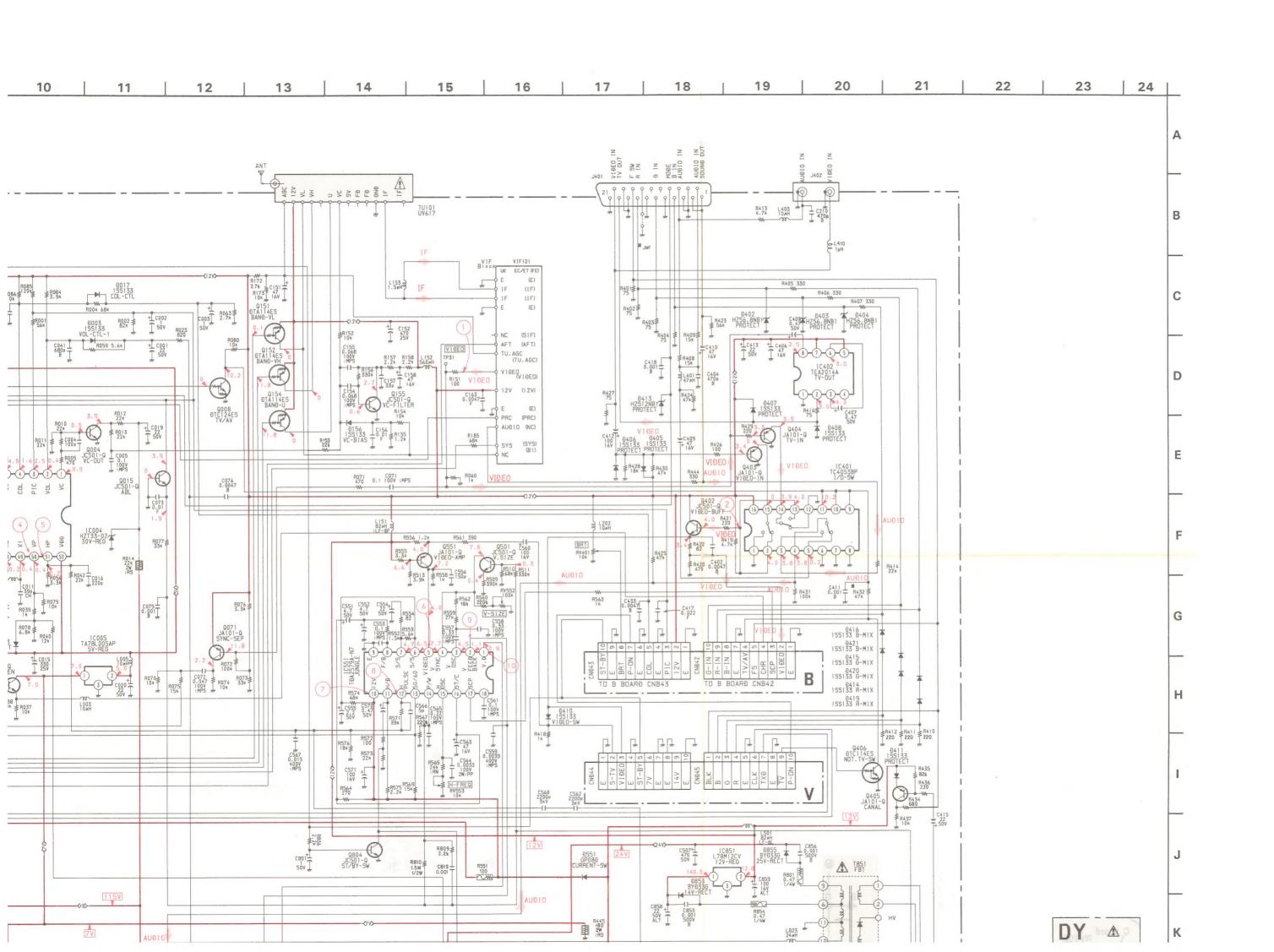
Pitch: 5mm Rating electrical power: 1/4W

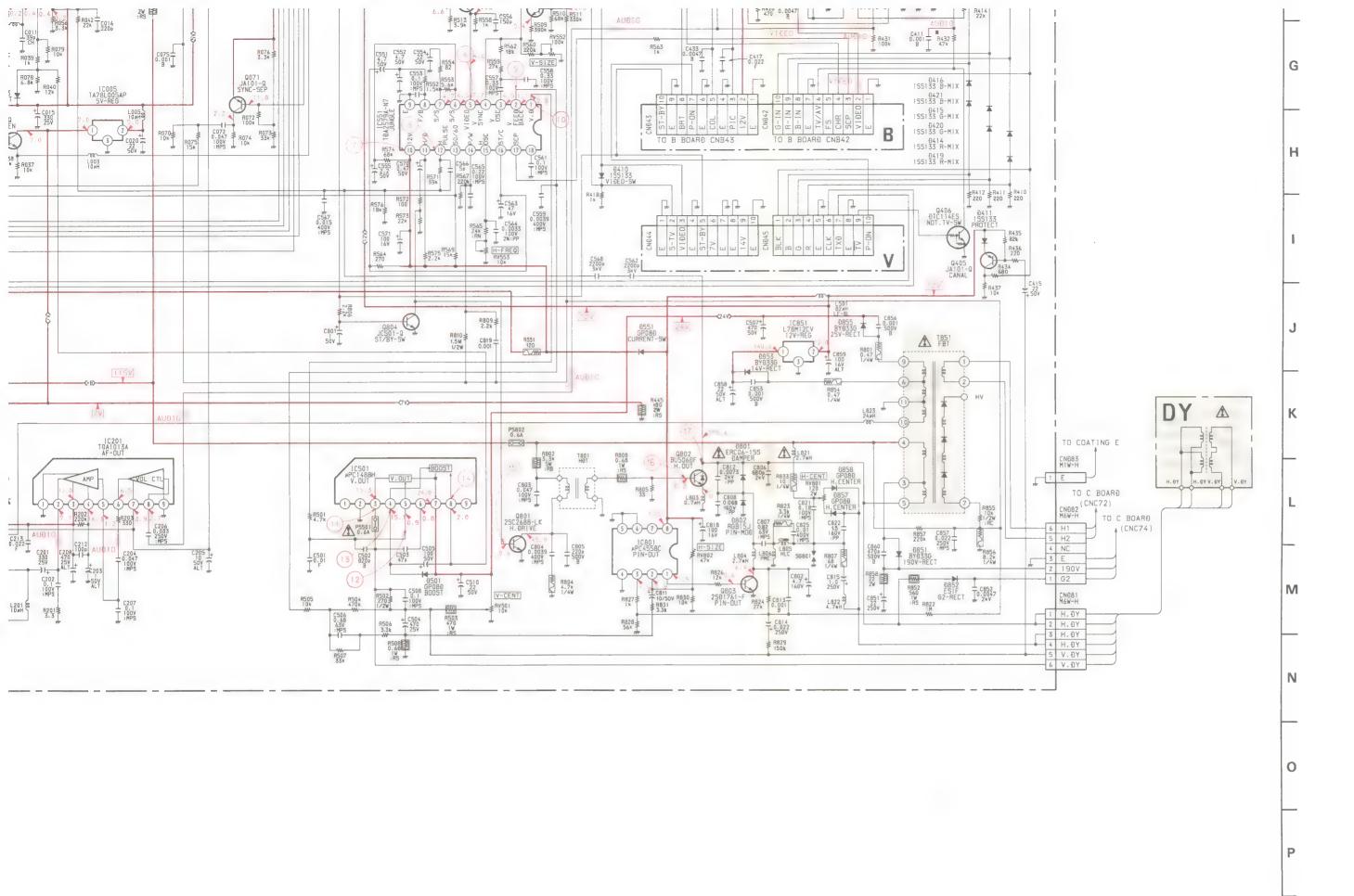
- All resistors are in ohms.
- : nonflammable resistor.
- - tusible resistor.
- ♠ ∴ internal component.
- panel designation.
- : adjustment for repair.
- All variable and adjustable resistors have characteristic curve B,unless otherwise noted.
- All voltages are in V.
- lacktriangle Readings are taken with a 10M Ω digital multimeter.
- Readings are taken with a PAL colour-bar signal input. () SECAM
- Voltage variations may be noted due to normal production tolerances.
- : B+line
- signal path.

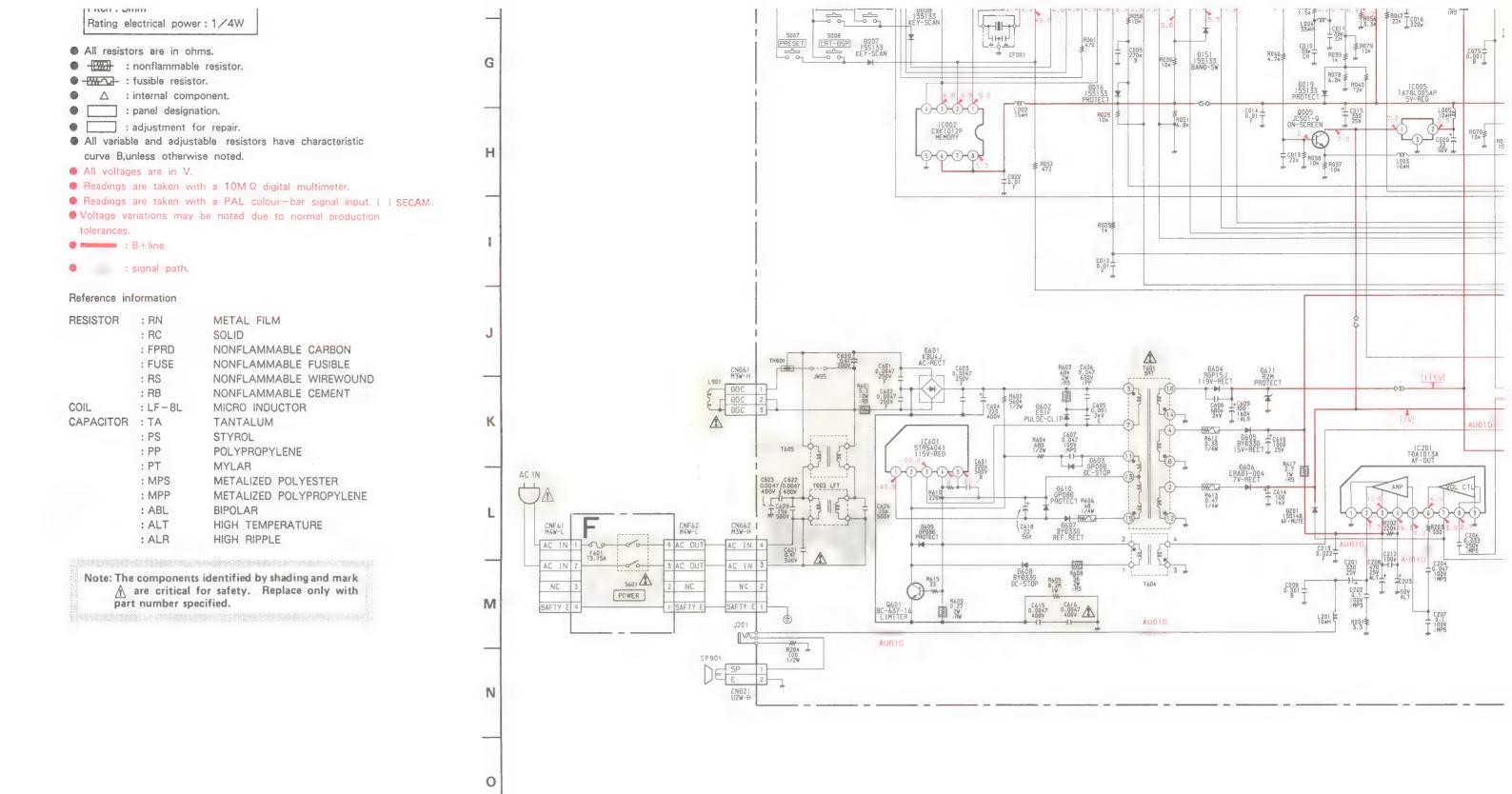
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE WIREWOUND
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM

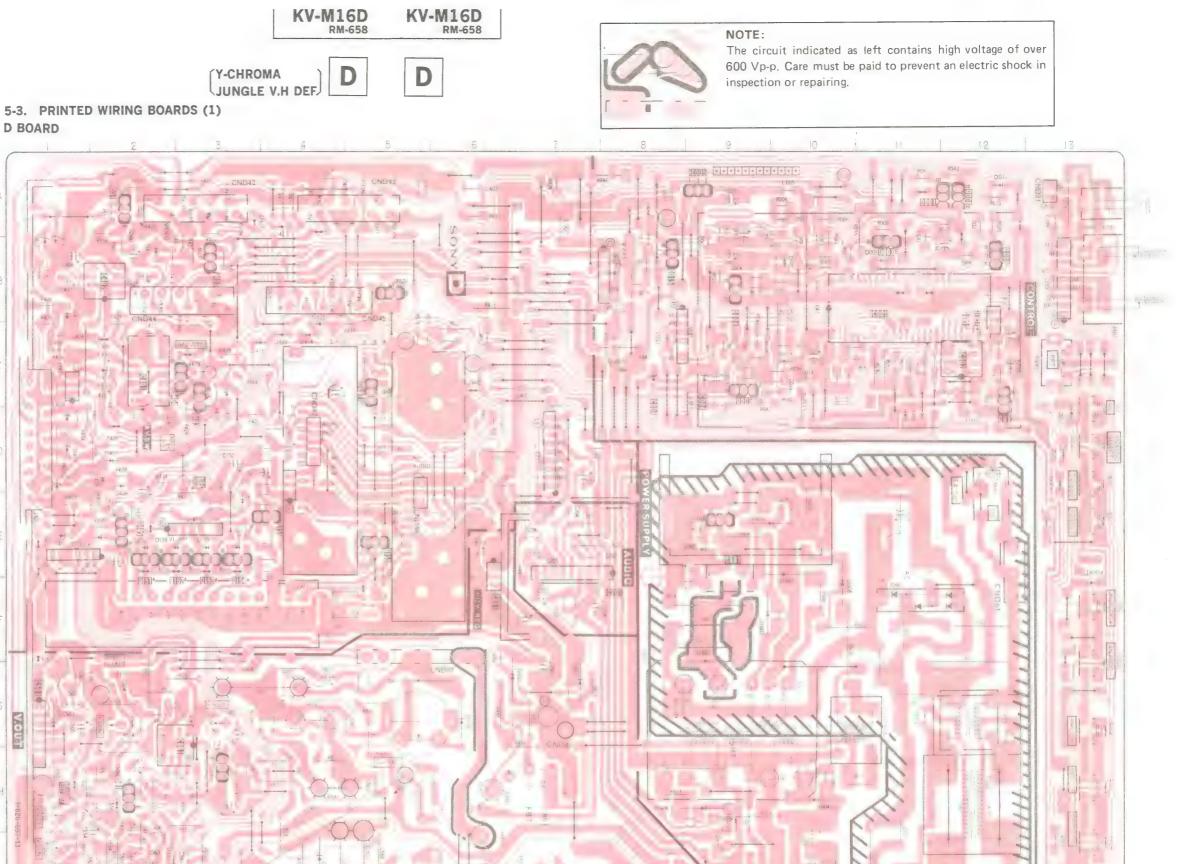




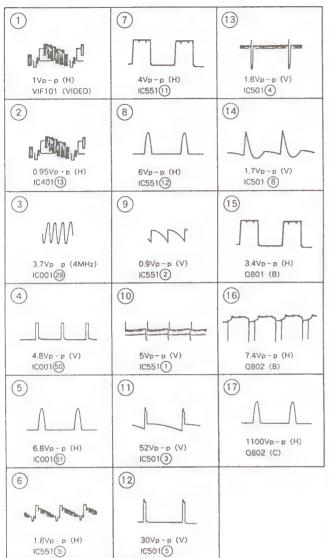




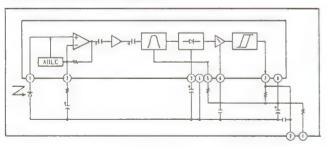
Р



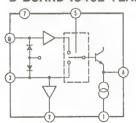
D BOARD WAVEFORM



D BOARD ICOO3 BX1389



D BOARD IC402 TEA2014A



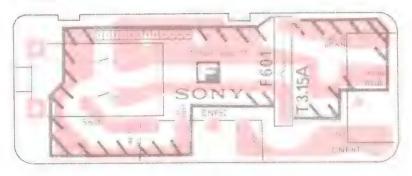
D BOARD

(POWER)

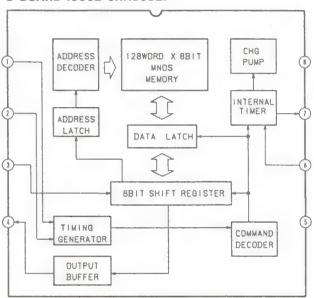


IC	;	D405	C-3
IC001 IC002 IC003 IC004 IC005	C-12 J-13 C-9	D406 D407 D408 D410 D411	D-2 D-2 D-2 B-2 E-2
IC201 IC401 IC402 IC501 IC551	B-2	D413 D414 D415 D416 D419	B-1 C-4 C-3 A-3 C-4
IC601 IC801 IC851	G-2	D421 D501 D551	C-4 A-4 G-1 I-2
TRANS			F-11
Q001 Q003 Q004 Q005 Q008	A-11 B-11 B-9 C-9 A-12	D603	F-9 F-9 H-10 J-9 H-9 E-10
Q009 Q012 Q015 Q071 Q151	B-12 C-12 B-8 C-5 E-2	D608 D609 D610 D611 D801	F-10 E-9 E-9 I-10 I-5
Q152 Q154 Q155 Q158 Q402 Q403	E-2 E-3 E-4 E-5 B-3 C-3	D802 D851 D852 D853 D855	I-4 J-6 J-6 G-7 G-6
Q404 Q405 Q406	C-3 E-2 B-5	D857 D858	G-6
Q501 Q551	H-2 A-2	VARIA RESIS	
Q601 Q801 Q802 Q803 Q804	E-9 J-3 J-5 H-3	RV401 RV501 RV552 RV553 RV801	G-2 H-1 J-2
	I-3	RV802	G-3
D10	B -11		
D002 D003 D004 D005 D007	B-10 F-13 J-13 E-13		
D008 D009 D010 D011 D016	D-13 D-13 D-13 A-12 D-11		
D017 D019 D025 D151 D156	A-10 C-10 C-12 C-8 E-3		
D201 D402 D403 D404	C-8 D-1 D-1 D-1		

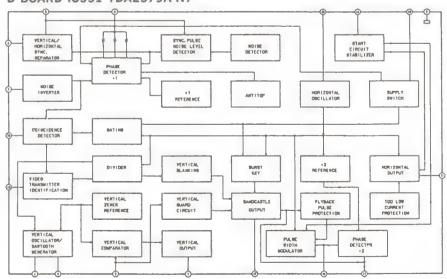
F BOARD



D BOARD ICO02 CXK1012P



D BOARD IC551 TDA2579A-N7



15

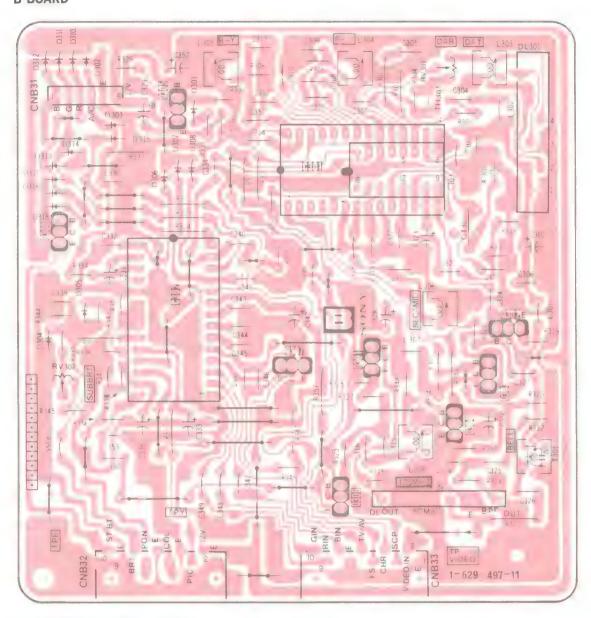
5-4. SCHEMATIC DIAGRAM (2) 3 5 7 8 9 10 11 12 13 14 FOCUS SCREEN B TO D BOARD CNÐ82 C326 R321 R348 33× (CHROMA DECODER) TO Đ BOARĐ (CNĐ43) V901 A37JUW10X PICTURE TUBE CNB32 C TO Đ BOARĐ CNĐ83 D Ε DED | CNB33 # #704 # #704 # #705 # #703 # CNB31 U6W-H 8316 8317 ISS133 B-BLK ISS133 B-BLK ₹ R736 2.2k F G **B** BOARD WAVEFORM C BOARD WAVEFORM Н (3) (5) 4 (3) 4 7 hours Therpor 7/22/2 1.5Vp-p (H) IC301 (2) 1.4Vp-p (H) IC301 (3) 0.95Vp-p (8.86MHz) 0.6Vp-p (H) IC301 (5) 1Vp-p (H) IC301 4 64Vp-p (H) 72Vp-p (H) 56Vp-p (H) Q709 (E) Q708 (E) Q707 (E) H1-H2 (6) (8) 9 MMM 2.2Vp-p (H) IC302 (1) 2.2Vp-p (H) IC302 (3) 2.2Vp-p (H) IC302 (5) 0.4Vp-p (H) IC302 (5)

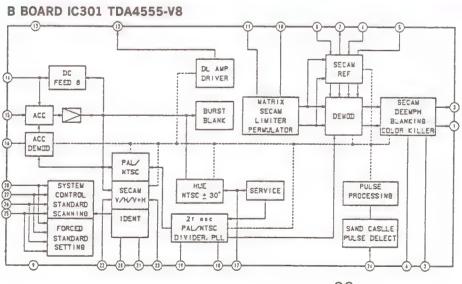


В

(CHOROMA DECODER)

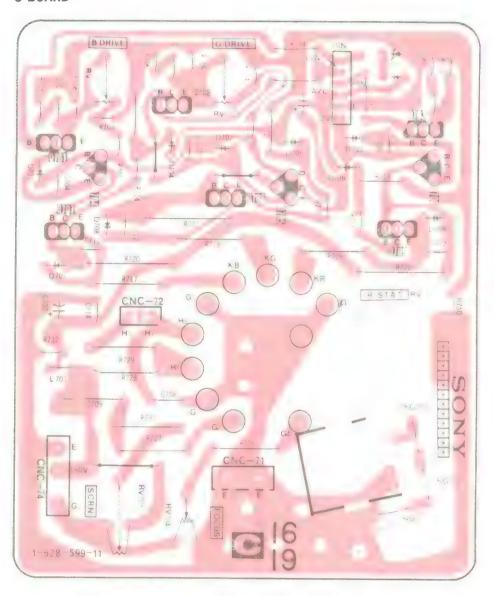
5-5. PRINTED WIRING BOARDS (2) B BOARD



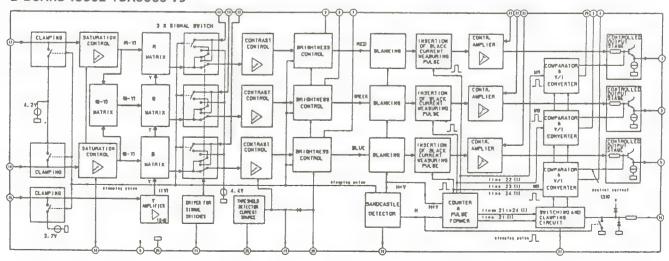


C (R. G. B OUT)

C BOARD



B BOARD IC302 TDA3505-V9



5-6. SEMICONDUCTORS

BX - 1398



TDA2579-N7



BC637-16



DTA114ES DTA124ES DTC114ES DTC124ES DTC143TS

ERC06-15S R₂M CATODO ANODO

L78M05CX L78M12CV



MAB8461P-W136 TDA3505-V9 TDA4555-V8 μPD4364CX-15L



BF199 BF871



KBU4J

CXK1012P µPC4558C





JA101-Q JC501-Q



MC14053BCP TC4053BP



TEA2014A



2SC2688



LATO CON LETTERE



MC921

M50436-616SP M50436-618SP



HZT33-02 µPC574J



CATODO

BF819





MC931

SAA5243E



(Top view)

µPC1488H



BU506DF



CQS51L-4 CQY24BL-4

STR54041



2SA1091 2SC2060



BYT33G BYT51D BYT52G ERA81-004 GP08D RGP01-17 RGP10G RGP15J

- CATODO

ANODO



TDA1013A



2SD1761-F



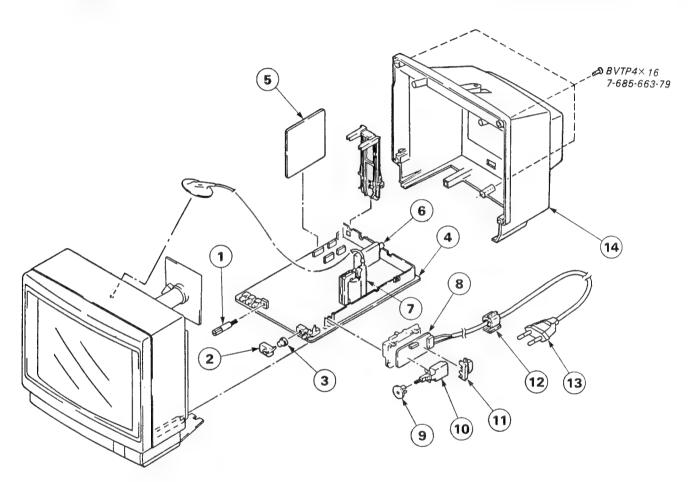
SECTION 6 EXPLODED VIEWS

NOTE:

- · Items with no part number and no des-
- Tems with no part number and no description are not stocked because they are seldom required for routine service.
 The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

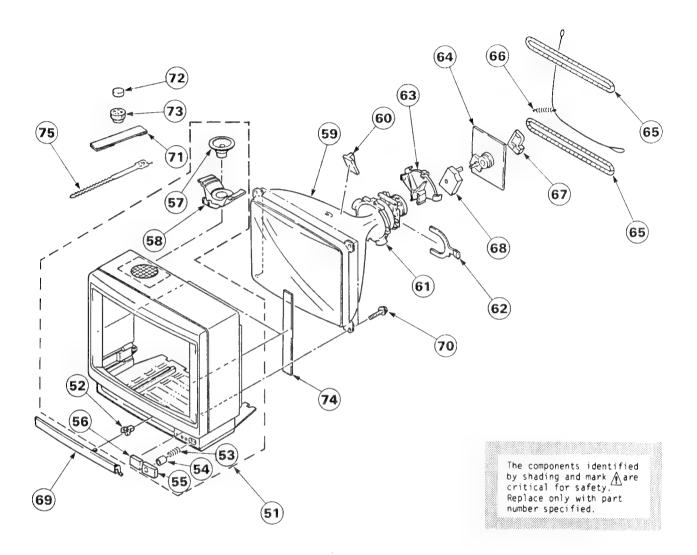
The components identified by shading and mark Aare critical for safety.
Replace only with part number specified.

6-1. CHASSIS



REF.NO. PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK
	BRACKET (B), LIGHT GUIDE GUIDE, LIGHT D BOARD, COMPLETE B BOARD, COMPLETE TUNER, ET (W-617) TRANSFORMER ASSY, FLYBACK		9 4-386-611-01 10 <u>A</u> .1-571-433-11 11 *4-386-620-01 12 <u>A</u> .4-022-115-01 13 <u>A</u> .1-559-824-11 14 4-391-420-01 4-391-420-11	COVER, SWITCH SWITCH, PUSH (AC POWER) COVER, POWER HOLDER, AC CORD CORD, POWER (WITH CONNECTOR) COVER, REAR (BLACK) COVER, REAR (WHITE)	

6-2. BEZEL



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO. PART NO.	DESCRIPTION	REMARK
60	X-4389-323-1 X-4389-323-3 4-374-714-01 4-382-732-11 4-391-417-01 4-391-418-01 1-503-344-21 4-391-423-01 X-8-738-852-05 3-703-961-01 X-1451-304-21 1-452-277-00	BEZNET ASSY (BLACK) BEZNET ASSY (WHITE) CATCH, PUSH SPRING BUTTON, POWER ORNAMENT, BUTTON, POWER WINDOW, ORNAMENTAL SPEAKER (8CM CONE TYPE) HOLDER, SPEAKER PICTURE TUBE (A37JUW1OX) SPACER, DY DEFLECTION YOKE (Y16SXA) MAGNET, BMC	52-58 52-58	65 A . 1-426-317-21 66 4-369-318-00	C BOARD, COMPLETE COIL, DEGAUSSING SPRING, TENSION COVER (REAR LID), CV VOL COVER (MAIN), CV VOL DOOR ASSY SCREW (S), PT PERMALLOY ASSY, CONVERGENCE MAGNET, DISK; 10MM Ø MAGNET, ROTATABLE DISK; 15MM (CUSHION, CRT	ð

SECTION 7 ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark A are critical for safety. Replace only with part number specified. ·

Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS • MF : μF, PF : μμF

RESISTORS

GOILS • MMH : InH, UH : باH • All resistors are in ohms • F : nonflammable

REF.NO.	PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1135-562-A	B BOARD, COM				C348 C349 C350 C351	1-106-375-12 1-106-375-12 1-124-917-11 1-101-888-00	MYLAR ELECT	0.022MF 0.022MF 33MF 68PF	10% 10% 20% 5%	250V 250V 50V 50V
	<cap< td=""><td>ACITOR></td><td></td><td></td><td></td><td>C352</td><td>1-124-120-11</td><td></td><td>220MF</td><td>20%</td><td>16V</td></cap<>	ACITOR>				C352	1-124-120-11		220MF	20%	16V
C301 C302 C303 C304 C305	1-106-220-00 1-124-120-11 1-101-005-00 1-106-367-00 1-102-971-00	MYLAR ELECT CERAMIC MYLAR CERAMIC	0.1MF 220MF 0.022MF 0.01MF 82PF	10% 20% 10% 5%	100V 16V 50V 400V 50V	CNB31	<00N *1-560-126-00	NECTOR> PLUG, CONNECT	OR (2.5MM)	6P	10*
C306 C307 C308 C309 C310	1-101-006-00 1-101-004-00 1-101-888-00 1-102-816-00 1-102-978-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	0.047MF 0.01MF 68PF 120PF 220PF	5% 5% 5%	50V 50V 50V 50V 50V		*1-565-393-11 *1-565-393-11 <tri< td=""><td></td><td></td><td></td><td></td></tri<>				
C311 C312 C313 C314 C315	1-102-953-00 1-102-953-00 1-102-816-00 1-102-978-00 1-102-944-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	18PF 18PF 120PF 220PF 7PF	5% 5% 5% 5% 0.5PF	50V 50V 50V 50V 50V		1-141-392-11 <dio - 8-719-911-19</dio 	DE>	MMER (1 GA	NG)	
C316 C317 C318 C319 C320	1-102-944-00 1-102-816-00 1-102-074-00 1-106-375-12 1-102-935-00	CERAMIC CERAMIC CERAMIC MYLAR CERAMIC	7PF 120PF 0.001MF 0.022MF 2PF	0.5PF 5% 10% 10% 0.25PF	50V 50V 50V 250V 50V	D303 D304 D305 D306	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 188119 DIODE 188119			
C321 C322 C323 C324 C325	1-130-785-11 1-106-383-00 1-124-499-11 1-102-074-00 1-101-004-00	MYLAR MYLAR ELECT CERAMIC CERAMIC	0.47MF 0.047MF 1MF 0.001MF 0.01MF	10% 10% 20% 10%	100V 100V 50V 50V 50V	D308 D310 D311 D312		D10DE 188119			
C326 C327 C328 C329 C330		CERAMIC CERAMIC ELECT TANTALUM CERAMIC	150PF 0.01MF 220MF 22MF 100PF	5% 20% 10% 5%	50V 50V 16V 16V 50V	D314 D315 D316 D317	8-719-911-19 8-719-911-19 8-719-911-19	DIODE ISS119 DIODE ISS119 DIODE ISS119 DIODE ISS119			
C331 C332 C333 C334 C335	1-124-927-11 1-130-783-00 1-124-499-11 1-106-375-12 1-106-375-12	ELECT MYLAR	4.7MF 0.33MF 1MF 0.022MF 0.022MF	20% 10% 20% 10% 10%	50V 100V 50V 250V 250V		<del 1-415-122-00 1-415-122-00</del 				
C336 C337 C339 C340 C341	1-124-927-11 1-130-834-00 1-106-375-12 1-130-783-00 1-130-783-00	MYLAR	4.7MF 1MF 0.022MF 0.33MF 0.33MF		50V 63V 250V 100V 100V	1C301 1C302	<1C> 8-759-947-20 8-759-947-19	1C TDA4555-V	3		
C342 C343 C344 C345 C346	1-124-120-11 1-106-375-12 1-106-375-12 1-106-375-12 1-101-880-00 1-106-375-12	ELECT MYLAR MYLAR MYLAR CERAMIC	220MF 0.022MF 0.022MF 0.022MF 47PF 0.022MF	20% 10% 10% 10% 5%	16V 250V 250V 250V 250V 50V	L301 L302 L303 L304	C01 1~408-423-00 1~408-408-00 1~404-539-11 1~404-554-11	INDUCTOR INDUCTOR COIL	150UH 8.2UH		
~ / 11	1 100 717 12	11141110	0.022111	10/4	4.701	6.504	וו דינע זיטד ו	COLL			



The components identified by shading and mark Aare critical for safety.

Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTI	(IN			REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
L305 L306 L307 L308	1-404-554-11 1-404-554-11 1-408-423-00 1-404-495-00	C011	150บ	Н			R352	1-249-436-11 1-249-437-11 1-249-413-11 1-247-887-00	CARBON CARBON	39K 47K 470	5% 1 5% 1	/4W /4W /4W /4W	
	<tra< td=""><td>NS1STOR></td><td></td><td></td><td></td><td></td><td>R356 R357</td><td>1-247-887-00 1-249-417-11</td><td>CARBON</td><td>1 K</td><td>5% 1</td><td>/4W /4W</td><td></td></tra<>	NS1STOR>					R356 R357	1-247-887-00 1-249-417-11	CARBON	1 K	5% 1	/4W /4W	
Q301 Q302	8-729-119-78 8-729-119-78	TRANSISTOR	2SC2785~	HFE			R399	1-247-903-00			5% 1	/4W	
Q303 Q304 Q305	8-729-119-78 8-729-119-78 8-729-119-78	TRANSISTOR TRANSISTOR TRANSISTOR	2SC2785-	IIFE				1-238-009-11		ARBON 220			
Q307 Q308	8-729-900-80	TRANSISTOR TRANSISTOR	DTC114ES				RV302	1-238-016-11		ARBON 10K			
Q309	8-729-173-38	TRANSISTOR	2SA733-K				T301	<tra 1-404-584-11</tra 	NSFORMER>				
R301		ISTOR>	1 27	E%	1.7.412								
R302 R303	1-249-412-11	CARBON CARBON	1.2K 47 390	5% 5%	1/4W 1/4W 1/4W		X301	-1-567-131-00	STAL> OSCILLATOR,	CRYSTAL			
R304 R305	1-249-408-11 1-249-416-11	CARBON CARBON	180 820	5% 5%	1/4W 1/4W		i •	<yc< td=""><td>MODULE></td><td></td><td></td><td></td><td></td></yc<>	MODULE>				
R306 R307 R308	1-249-419-11 1-249-431-11 1-249-417-11	CARBON CARBON CARBON	1.5K 15K 1K	5% 5% 5%	174W 174W 174W		YCM301	1: 235-753-21	AC WODATE				
R309 R310	1-249-409-11 1-247-891-00	CARBON CARBON	220 330K	5% 5%	1/4W 1/4W		1	************* *1-628-600-11		*******	******	*****	*******!
R311 R312 R313	1-247-891-00 1-249-405-11 1-249-405-11	CARBON CARBON CARBON	330K 100 100	5% 5% 5%	1/4W 1/4W 1/4W			1 040 000 11	*****				
	1-249-405-11	CARBON CARBON	100 47K	5% 5%	1/4W 1/4W		CHECI		NECTOR>	50D 4D			
R317	1-249-404-00	CARBON CARBON	82 10K	5% 5%	1/4W 1/4W			*1-566-664-11 *1-566-664-11					
	1-247-848-11 1-249-419-11 1-249-437-11	CARBON CARBON CARBON	5.1K 1.5K 47K	5% 5% 5%	1/4W 1/4W 1/4W			<fus< td=""><td></td><td></td><td></td><td></td><td></td></fus<>					
R321 R322	1-249-417-11	CARBON CARBON	1.2K	5% 5% 5%	1/4W 1/4W		F601 ∆	1-576-016-11 1-533-087-00	FUSE, GLASS- HOLDER, FUSE	-TURE (TI E: F601	ME-LAG)	3, 15	1/250V
R323 R324 R325	1-249-410-11	CARBON CARBON	270 2.2K 1.5K	5%	1/4W 1/4W 1/4W		!	<swi< td=""><td>TCH></td><td></td><td></td><td></td><td></td></swi<>	TCH>				
R326 R327	1-249-417-11 1-249-415-11	CARBON CARBON	1K 680	5% 5% 5%	1/4W 1/4W		!	. 1-571-433-11 ********					
R328 R329	1-249-437-11 1-247-891-00	CARBON CARBON	47K 330K	5% 5%	1/4W 1/4W		i	*A-1330-946-Λ	C BOARD, COL	4PLETE	*****	* * * * * *	
R330 R331	1-249-440-11 1-247-895-00	CARBON	82K 470K	5%	1/4W 1/4W			*4-374-704-01		LID), CV			
R332 R333 R334	1-247-903-00 1-214-907-00 1-249-426-11	CARBON METAL CARBON	1M 56K 5.6K	5% 1% 5%	1/4W W 1/4W		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*4-374-717-01	COVER (MAIN)	. CV VOL			
R335 R336	1-249-439-11	CARBON CARBON	68K 4.7K	5% 5%	1/4W 1/4W		C701		ACITOR> CERAMIC	270PF	5%		507
R337 R338 R341	1-249-413-11 1-249-413-11 1-249-431-11	CARBON CARBON	470 470	5% 5% 5%	1/4W 1/4W		C702 C703	1-102-980-00 1-102-820-00	CERAMIC CERAMIC	270PF 330PF	5% 5%	;	50V 50V
R343	1-247-885-00	CARBON CARBON	15K 180K	5%	1/4W 1/4W		C704 C705	1-102-114-00 1-102-114-00	CERAMIC CERAMIC	470PF 470PF	10 10	ž r	50V 50V
R344 R345 R346	1-249-432-11 1-249-433-11 1-249-413-11	CARBON CARBON CARBON	18K 22K 470	5%%% 5%% 5%%	1/4W 1/4W 1/4W		C707 C708	11-102-114-00 1-123-947-00 1-162-116-00	CERAMIC ELECT CERAMIC	470PF 10MF 680PF	10 20 10	i d	50V 250V 2KV
	1-249-417-11 1-249-435-11	CARBON CARBON	1 K 33 K	5% 5%	1/4W 1/4W		C709 C710	1-136-666-11 1-124-477-11	FILM ELECT	0.01MF 47MF	5% 20	1	KV 16V
R349	1-249-436-11	CARBON	39K	5%	1/4W		C711	1-102-074-00	CERAMIC	0.001MF	10	. .	700

										C [
REF.NO. PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION		L	REMARK
C712 1-102-074-00 C713 1-102-074-00 C714 1-162-318-11	CERAMIC CERAMIC	0.001MF	10%	50V 50V 500V	R722 R726 R727 R728	1-216-463-00 1-202-719-00 1-202-838-00 1-202-842-11	SOLID SOLID SOLID	12K 5% 1M 10% 100K 10% 220K 10%	2W 1/2W 1/2W 1/2W	
CNC71 *1-508-786-00	NECTOR>	D /ENN DITCH	n ac /i		R729	1-216-348-00		0.82 10%	1/2W	
CNC72 *1-560-123-00 CNC73 *1-560-126-00 CNC74 *1-508-765-00	PLUG, CONNECT PLUG, CONNECT	OR (2.5MM) 3 OR (2.5MM) 6	SP SP		R731 R732 R734 R735 R736	1-202-719-00 1-247-895-00 1-249-421-11 1-249-421-11 1-249-421-11	CARBON CARBON CARBON	1M 10% 470K 5% 2.2K 5% 2.2K 5% 2.2K 5%	1/2W 1/4W 1/4W 1/4W 1/4W	
<010	DDE>					∠VAR	TABLE RESISTO	Q.5		
D701 8-719-911-19 D702 8-719-911-19 D703 8-719-911-19 D704 8-719-911-19 D705 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119				RV702 RV703 RV704	1-237-749-11 1-237-749-11 1-230-641-11 1-230-641-11 1-230-619-11	RES, ADJ, CAI RES, ADJ, CAI RES, ADJ, ME RES, ADJ, ME	RBON 2200 RBON 2200 FAL GLAZE 2 TAL GLAZE 2	.2M	
D706 8-719-911-19 D707 8-719-911-19	DIODE 188119				1	******				*******
υ708 8-719-911-19 υ709 8-719-911-19	DIODE 188119 DIODE 188119				1 1 1 1 1 1	*A-1345-840-A	D BOARD, COM			
<ja(< td=""><td></td><td></td><td></td><td></td><td></td><td>*4-341-751-01 *4-341-752-01</td><td></td><td></td><td></td><td></td></ja(<>						*4-341-751-01 *4-341-752-01				
J901 1-526-814-11	SOCKET, PICTU	RE TUBE			1 1 1 1	∠CAD.	ACITOR>			
<00	L>				C001	1-126-233-11		22MF	20%	50V
L701 1-407-496-00	INDUCTOR ANSISTOR>	2.2MMH			C002 C003 C004	1-124-499-11 1-124-499-11	ELECT	1MF 1MF 100PF 0.1MF	20% 20% 5% 10%	50V 50V 50V 100V
Q701 8-729-119-78	TRANSISTOR 2S	C2785-HFE			C007	1~124~927-11	ELECT	4.7MF	20%	50V
Q702 8-729-119-78 Q703 8-729-119-78 Q704 8-729-906-70 Q705 8-729-906-70	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR BF TRANSISTOR BF	C2785-HFE 871			C009 C010 C011 C012	1-102-111-00 1-102-965-00 1-102-965-00 1-101-004-00	CERAMIC CERAMIC CERAMIC CERAMIC	270PF 39PF 39PF 0.01MF	10% 5% 5%	50V 50V 50V 50V
9706 8-729-906-70 9707 8-729-200-17	TRANSISTOR 2S	A1091-0				1-102-959-00 1-101-004-00	CERAMIC	22PF 0.01MF	5%	50V 50V
9708 8-729-200-17 9709 8-729-200-17	TRANSISTOR 2S TRANSISTOR 2S				C015 C016 C019	1-124-479-14 1-102-978-00 1-126-233-11	ELECT CERAMIC ELECT	330MF 220PF 22MF	20% 5% 20%	25V 50V 50V
<re:< td=""><td>SISTOR></td><td></td><td></td><td></td><td>C020 C021</td><td>1-126-233-11 1-102-114-00</td><td>ELECT CERAMIC</td><td>22MF 470PF</td><td>20% 10%</td><td>50V 50V</td></re:<>	SISTOR>				C020 C021	1-126-233-11 1-102-114-00	ELECT CERAMIC	22MF 470PF	20% 10%	50V 50V
R701 1-249-423-11 R702 1-249-423-11 R703 1-249-415-11 R704 1-249-415-11	CARBON CARBON CARBON CARBON	3.3K 5% 3.3K 5% 680 5% 680 5%	1/4W 1/4W 1/4W 1/4W		C022 C033 C034	1-101-004-00 1-101-004-00 1-126-101-11	CERAMIC CERAMIC ELECT	0.01MF 0.01MF 100MF	20%	50V 50V 16V
R705 1-249-401-11	CARBON	47 5%	1/4W		C037 C041	1 · 101 · 004-00 1 · 102 - 116 · 00	CERAMIC CERAMIC	0.01MF 680PF	10%	50V 50V
R706 1-249-401-11 R707 1-249-401-11 R708 1-249-417-11 R709 1-249-416-11	CARBON CARBON CARBON CARBON	47 5% 47 5% 1K 5% 820 5%	1/4W 1/4W 1/4W 1/4W		C043 C071 C072	1-102-978 00 1-106-220-00 1-106-383-00	CERAMIC MYLAR MYLAR	220PF 0.1MF 0.047MF	5% 10% 10%	50V 100V 100V
R710 1-249-413-11	CARBON	470 5%	1/4W		C073	1-101-004-00 1-102-074-00		0.01MF 0.001MF	10%	50V 50V
R712 1-247-891-00 R713 1-247-881-00 R714 1-249-417-11 R715 1-249-417-11	CARBON CARBON CARBON CARBON	330K 5% 120K 5% 1K 5% 1K 5%	1/4W 1/4W 1/4W 1/4W		C076 C151 C152	1-102-125-00 1-124-477-11 1-124-480-11	CERAMIC ELECT ELECT	0.0047MF 47MF 470MF	10% 20% 20%	50V 16V 25V
R716 1-249-417-11 R717 1-202-824-00	CARBON	1K 5%	1/4W		C154 C155	1-106-216-00 1-106-216-00	MYLAR MYLAR	0.068MF 0.068MF	10% 10%	100V 100V
R718 1-202-824-00 R719 1-202-824-00	SOLID SOLID SOLID	3.3K 10% 3.3K 10% 3.3K 10%	1/2W 1/2W 1/2W		C156 C157 C158	1-101-004-00 1-102-963-00 1-124-477-11	CERAMIC CERAMIC ELECT	0.01MF 33PF 47MF	5% 20%	50V 50V 16V
R720 1-216-463-00 R721 1-216-463-00	METAL OXIDE METAL OXIDE	12K 5% 12K 5%	2W 2W		C163		CERAMIC	0.0047MF	w ** 70	50V



The components identified by shading and mark Aare critical for safety.

Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.		l		REMARK
C202 C203 C204	1-124-479-11 1-106-220-00 1-124-791-11 41-106-383-00 1-123-875-11	ELECT MYLAR ELECT MYLAR ELECT	330MF 0.1MF 1MF 0.047MF 10MF		25V 100V 50V 100V 50V	C615 A	1-126-101-11 A 1-162-578-51 A 1-162-578-51 1-126-233-11 A 1-136-519-11	CERAMIC CERAMIC	100MF 0.0047MF 0.0047MF 22MF	20% 20% 20%	16V 400V 400V 50V
C207 C208 C209	1-106-379-12 1-106-220-00 1-126-104-11 1-102-074-00 1-102-114-00	MYLAR MYLAR ELECT CERAMIC	0.033MF 0.1MF 470MF 0.001MF 470PF	10% 10% 20% 10% 10%	250V 100V 25V 50V 50V	C621 & C622 & C623 & C626 & C626	A. 1-136-519-11 A. 1-136-519-11 A. 1-162-578-51 A. 1-162-378-51 A. 1-102-316-91 A. 1-102-316-91	CERAMIC CERAMIC CERAMIC	0.47MF 0.47MF 0.0047MF 0.0047MF 15PF 15PF	20% 20% 20% 20% 5%	300V 300V 400V 400V 500V 500V
C213	1-102-973-00 1-101-005-00 1-101-003-00 1-102-114-00 1-124-902-00	CERAMIC CERAMIC CERAMIC ELECT	0.47MF	10% 20%	50V 50V 50V 50V 50V	r631	1-102-244-00 1-124-499-11 1-123-932-00 1-106-383-00 1-106-357-00	CERAMIC	220PF 1MF 4.7MF 0.047MF 0.0039MF	10% 20% 20% 10% 10%	500V 50V 160V 100V 400V
C407 C409 C410 C411		ELECT ELECT CERAMIC	47MF 0.47MF 47MF 47MF 0.001MF	20% 20% 10%	16V 50V 16V 16V 50V	C805	1-102-214-00 1-162-116-51 1-130-783-00 1-136-188-11 1-123-875-11	CERAMIC	22005	10% 10% 10% 10% 20%	500V 2KV 100V 160V 50V
C413 C417 C418 C433		ELECT CERAMIC CERAMIC CERAMIC	100MF 22MF 0.022MF 0.001MF 0.0047MF	20° n 20° n 10° n 10° n	16V 50V 50V 50V 50V	C812 <u>∕</u> C813	\$\lambda 1-136-073-11 \\ 1-102-074-00 \\ 1-106-375-12 \\ 1-124-634-11 \\ 1-126-101-11	FILM CERAMIC	0.0073MF 0.001MF 0.022MF 1MF 100MF	3% 10% 10% 20% 20%	2KV 50V 250V 250V 16V
C505	1-124-122-11	ELECT		10% 5% 20% 20%	50V 50V 50V 25V 50V	1	1:102-074-00 1-106-226-00 1-136-541-11 1-106-367-00 1-123-948-00		0.001MF 0.18MF 1.5MF 0.01MF 22MF	10% 10% 5% 10% 20%	50V 100V 160V 400V 250V
	1-130-833-00 1-124-913-11 1-106-220-00 1-126-233-11 1-124-927-11		0.82MF 470MF 0.1MF 22MF 4.7MF	10% 20% 10% 20% 20%	63V 50V 100V 50V 50V	C852 C853 C854 C855 C856	1-162-114-00 1-162-318-11 1-110-180-81 1-110-180-81 1-162-318-11	CERAMIC	0.0047MF 0.001MF 0.27MF 0.27MF 0.001MF	10% 10% 10%	2KV 500V 100V 100V 500V
C556	1-101-361-00	CERAMIC	2.2MF 150PF	20% 10% 20% 20% 5%	50V 100V 50V 50V 50V	C857 C858 C859 C860	1-106-375-12 1-123-357-00 1-126-101-11 1-102-228-00	MYLAR ELECT ELECT CERAMIC	0.022MF 22MF 100MF 470PF	10% 20% 20% 10%	250V 50V 16V 500V
C558	1-130-783-00 1-130-783-00 4-106-357-00 1-126-101-11 1-106-220-00	MYLAR MYLAR MYLAR ELECT MYLAR	0.33MF 0.33MF 0.0039MF 100MF 0.1MF	10% 10% 10% 20% 10%	100V 100V 400V 16V 100V	CF001	<fil 1-577-082-11</fil 		RAMIC		
C563 C564	1-161-961-00 1-124-477-11 1-136-298-00 1-106-228-00 1-102-942-00	CERAMIC ELECT FILM MYLAR CERAMIC	0.0022MF 47MF 0.0033MF 0.22MF 5PF	10% 20% 25 10% 1PF	3KV 16V 100V 100V 50V	CND42 CND43	<pre><con *1-560-290-00="" *1-565-394-11="" *1-568-765-00<="" pre=""></con></pre>	NECTOR> PLUG. CONNECTION, BOARD TO PIN, BOARD TO PIN, CONNECT	O BOARD COM O BOARD COM	VECTOR VECTOR	
	1-106-371-00 1-161-961-00 1-124-902-00 1-126-101-11 1-161-964-61	MYLAR CERAMIC ELECT ELECT CERAMIC	0.015MF 0.0022MF 0.47MF 100MF 0.0047MF	10% 10% 20% 20%	400V 3KV 50V 16V 250V	CND62 CND81 CND82	*1-565-458-11 *1-564-038-00 *1-508-768-00 *1-508-784-00	PIN, CONNECT CONNECTOR PL PIN, CONNECT PIN, CONNECT	OR 3P UG, DY (MINI OR (5MM PITO	I) 6P CH) 6P	
C603 ⚠ . C604	1-161-964-61 1-161-964-61 1-125-293-00 1-161-754-00 1-136-637-11	CERAMIC CERAMIC ELECT (BLOCK) CERAMIC FILM	0.0047MF 0.0047MF 220MF 0.001MF 0.047MF	10% 10%	250V 250V 400V 2KV 630V	D002 D003 D004	<pre></pre>				
C608 C609	1-106-383-00 1-162-116-00 1-124-347-00 1-124-557-11	MYLAR CERAMIC ELECT ELECT	0.047MF 680PF 100MF 1000MF	10% 10% 20% 20%	100V 2KV 160V 25V		\$ -719-911-19 \$ -719-970-79 *4-389-319-01	DIODE PLED-H HOLDER, LED;	544CL-6		

The components identified by shading and mark ♠ are critical for safety. Replace only with part number specified.



REF.NO. PART NO. DESCRIPTION	REMARK REF.NO. P	ART NO.	DESCRIPTION
D007 8-719-911-19 D10DE 1SS119 D008 8-719-911-19 D10DE 1SS119 D009 8-719-911-19 D10DE 1SS119 D010 8-719-911-19 D10DE 1SS119	10801 8	-368 - 683 - 01 - 759 - 145 - 58	SPACER, MICA: 1C601 SPRING: 1C601 IC UPC4558C
D011 8-719-911-19 D10DE 1SS119 D016 8-719-911-19 D10DE 1SS119 D017 8-719-911-19 D10DE 1SS119		-759-601-39 -368-683-01	TC UPC78M12H SPRING: TC851
D019 8-719-911-19 D10DE 1SS119 D025 8-719-109-71 D10DE RD3.9ES-B1 D151 8-719-911-19 D10DE 1SS119		<507-678-00 -561-534-00	JACK
D156 8-719-911-19 D10DE 1SS119 D201 8-719-911-19 D10DE 1SS119 D402 8-719-109-96 D10DE RD6.8ES-B1 D403 8-719-109-96 D10DE RD6.8ES-B1 D404 8-719-109-96 D10DE RD6.8ES-B1	3402 1	-563-500-11 - cott	JACK BLOCK, PIN (L TYPE) 2P
D405 8-719-911-19 D10DE 1SS119 D406 8-719-911-19 D10DE 1SS119 D407 8-719-911-19 D10DE 1SS119 D408 8-719-911-19 D10DE 1SS119 D410 8-719-911-19 D10DE 1SS119	1.003 1 1.004 1 1.005 1	-408-409-00 -408-415-00 -410-663-31	INDUCTOR 15UH ENDUCTOR 10UH INDUCTOR 33UH INDUCTOR 10UH INDUCTOR 82UH
D411 8-719-911-19 DIODE 1SS119 D413 8-719-110-30 DIODE RD12ES-B1 D414 8-719-911-19 DIODE 1SS119 D415 8-719-911-19 DIODE 1SS119 D416 8-719-911-19 DIODE 1SS119	L153 1 L201 1 L202 1	-408-399-00 -408-409-00 -408-409-00	INDUCTOR 560UH INDUCTOR 1.5UH INDUCTOR 10UH INDUCTOR 10UH INDUCTOR 47UH
D419 8-719-911-19 D10DE 1SS119 D420 8-719-911-19 D10DE 1SS119 D421 8-719-911-19 D10DE 1SS119 D501 8-719-911-55 D10DE 0056 D551 8-719-911-55 D10DE 0056	L410 1 L501 1 L803 1	-410-316-11 -408-226-00 -407-365-00	INDUCTOR 100H INDUCTOR 1UH INDUCTOR 82UH COIL, CHOKE COIL(WITH CORE)
D601 8-719-946-90 DIODE KBU4JL-6088 D602 8-719-300-65 DIODE ES1F D603 8-719-911-55 DIODE U056 D604 8-719-901-58 DIODE RGP15J D605 8-719-300-33 DIODE RU3AM	1.806 1 1.821 1 1.822 1	-459-856-11 -459-881-11 -410-067-21	HLC COIL, FERRITE COIL, CHOKE 2.7MMH INDUCTOR 4.7MMH COIL, FERRITE
D606 8-719-908-06 D10DE ERA81-005 D607 8-719-300-33 D10DE RU3AM D608 8-719-300-33 D10DE RU3AM D609 8-719-911-55 D10DE RU5G D610 8-719-911-55 D10DE U05G	PS501 A. 1 PS80 2A. 1	<10 L -532-679-91 -532-679-91	INK> LINK, IC 0.6A LINK, IC 0.6A
D611 8-719-303-49 D10DE R2M D801 8-719-945-80 D10DE ERC06-15S			S1STOR>
D802 8-719-901-58 D10DE RGP15J D851 8-719-300-33 D10DE RU3AM D852 8-719-300-65 D10DE ES1F	Q003 8 Q004 8	-729-900-63 -729-119-78	TRANSISTOR DTC124ES TRANSISTOR DTA124ES TRANSISTOR 2SC2785-HFE TRANSISTOR 2SC2785-HFE
D853 8-719-300-33 DIODE RU3AM D855 8-719-300-33 DIODE RU3AM D857 8-719-911-55 DIODE U05G D858 8-719-911-55 DIODE U05G	0008 8 0009 8	-729-900-36 -729-900-74	TRANSISTOR DTC124ES TRANSISTOR DTC143TS TRANSISTOR 2SA733-K
<1C>	Q015 8 Q071 8	-729-119-78 -729-173-38	TRANSISTOR 2SC2785-HFE TRANSISTOR 2SA733-K TRANSISTOR DTAIL4ES
1C001 8-759-630-92 IC M50436-616SP 1C002 8-752-330-60 IC CXK1012P 1C003 8-741-139-80 IC BX-1398 1C004 8-759-157-40 IC UPC574J 1C005 8-759-708-05 IC NJM78L05A	Q154 8 Q155 8 Q158 8	-729 -900 -61 -729 -119 -78 -729 -901 -59	TRANSISTOR DTAILLES TRANSISTOR DTAILLES TRANSISTOR 2SC2785-HFE TRANSISTOR BF199 TRANSISTOR 2SC2785-HFE
1C201 8-759-980-45 IC TDA1013A-N4 1C401 8-759-340-53 IC HD14053BP IC402 8-759-946-32 IC TEA2014A IC501 8-759-113-05 IC UPC1488H *4-368-683-01 SPRING; IC501	Q404 8 Q405 8 Q406 8	729~173~38 -729~173~38 -729~900~80	TRANSISTOR 2SA733-K TRANSISTOR 2SA733-K TRANSISTOR 2SA733-K TRANSISTOR DTC114ES TRANSISTOR 2SC2785-HFE
1C551 8-759-973-52 IC TDA2579A/N7 1C601 8-749-901-65 IC STR54041			TRANSISTOR 2SA733-K TRANSISTOR BC637-16



REF.NO.	PART NO.					PART NO.	DESCRIPTION				REMARK
Q801 Q802 Q803 Q804	8-729-119-80 8-729-906-69 *4-389-343-01 8-729-920-92 8-729-119-78	TRANSISTOR 2S TRANSISTOR BU SPRING; Q802 TRANSISTOR 2S TRANSISTOR 2S ISTOR> CARBON CARBON CARBON CARBON CARBON CARBON	C2688- 506DF D2096- C2785-	-LK -EF -HFE	R084 R085 R086 R151	1-249-429-11 1-249-405-11	CARBON CARBON CARBON CARBON	3.9K 120K 10K 100	5% 5% 5%	1 : 18 1 : 48 1 : 48 1 / 48	
	<res< td=""><td>ISTOR></td><td></td><td></td><td>R152 R153 R154</td><td>1-249-429-11 1-249-433-11 1-249-429-11</td><td>CARBON CARBON CARBON</td><td>10K 22K 10K</td><td>5% 5% 5%</td><td>174W 174W 174W</td><td></td></res<>	ISTOR>			R152 R153 R154	1-249-429-11 1-249-433-11 1-249-429-11	CARBON CARBON CARBON	10K 22K 10K	5% 5% 5%	174W 174W 174W	
R001 R002	1-249-438-11 1-249-440-11	CARBON CARBON	56K 82K	5% 1/4W 5% 1/4W	R155 R156	1-249-418-11 1-247-891-00	CARBON CARBON	1.2K 330K	5% 5%	1/4W 1/4W	
R004 R005 R006	1-249-439-11 1-249-413-11 1-249-441-11	CARBON CARBON CARBON	68K 470 100K	5% 1/4W 5% 1/4W 5% 1/4W	R157 R158 R160 R162	1-249-421-11 1-249-421-11 1-249-405-11 1-249-425-11	CARBON CARBON CARBON CARBON	2.2K 2.2K 100 4.7K	5%% 5%% 5%% 5%%	1/4W 1/4W 1/4W 1/4W	
R008 R009 R010	1-249-429-11 1-249-429-11 1-249-433-11	CARBON CARBON CARBON	10K 10K 22K	5% 1/4W 5% 1/4W 5% 1/4W 5% 1/4W	R163	1-249-425-11	CARBON CARBON	4.7K	5%	1/4W 1/4W	
R011 R012	1-249-433-11 1-249-433-11	CARBON CARBON	22K 22K	5% 1/4W 5% 1/4W	R172 R173 R180	1-249-422-11 1-249-429-11 1-249-419-11	CARBON CARBON CARBON	470 2.7K 10K 1.5K	5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%	174W 174W 174W	
R013 R014	1-249-433-11 1-215-900-11	CARBON METAL OXIDE	22K 22K	5% 1/4W 5% 2W	R185	1-249: 439-11	CARBON	68K		1/4W	
R015 R016 R017	1-249-421-11 1-249-433-11 1-249-407-11	CARBON CARBON CARBON	2.2K 22K 150	5% 2W 5% 1/4W 5% 1/4W 5% 1/4W	R186 R201 R202	1-249-441-11 1-249-387-11 1-247-887-00	CARBON CARBON CARBON	100K 3.3 220K	5% 5% 5%	174W 174W 174W	
R018 R019	1-249-417-11 1-249-413-11	CARBON CARBON	1K 470	5% 1/4W 5% 1/4W	R203 R204	1 · 249 · 411 - 11 1 · 247 - 739 - 11	CARBON CARBON	330 100	5% 5%	1/4W 1/2W	
R020 R021 R022	1-249-413-11 1-249-413-11 1-249-411-11	CARBON CARBON CARBON	470 470 330	5% 1/4W 5% 1/4W 5% 1/4W	R401 R402 R403	1-247-804-11 1-247-804-11 1-247-804-11	CARBON CARBON CARBON	75 75 75	55555555	174W 174W 174W	
R023 R025	1-249-416-11 1-249-417-11	CARBON CARBON	820 1K	5% 1/4W 5% 1/4W	R404 R405	1-247-804-11 1-249-411-11	CARBON CARBON	75 330	5% 5%	1/4W 1/4W	
R029 R030 R035	1-249-429-11 1-249-429-11 1-249-431-11	CARBON CARBON CARBON	10K 10K 15K	5% 1/4W 5% 1/4W 5% 1/4W	R406 R407 R408	1-249-411-11 1-249-411-11 1-249-431-11	CARBON CARBON CARBON	330 330 15K	5% 5%	1/4W 1/4W 1/4W	
R037	1-249-429-11	CARBON	10K	5% 1/4W	R409 R413	1-249-431-11 1-249-425-11	CARBON CARBON	15K 4.7K	5% 5% 5%	1/4W 1/4W	
R038 R039 R040	1-249-429-11 1-249-417-11 1-249-430-11	CARBON CARBON CARBON	10K 1K 12K	5% 1/4W 5% 1/4W	R410 R411	1-249-409-11 1-249-409-11	CARBON CARBON	220 220	5% 5%	1/4W 1/4W	
R042 R043	1-249-433-11 1-249-429-11	CARBON	22K 10K	5% 1/4W 5% 1/4W	R412 R414 R416	1 · 249 · 409 · 11 1 · 249 · 433 · 11 1 · 247 · 804 · 11	CARBON CARBON CARBON	220 22K 75	5%% 5%% 5%% 5%%	1/4W 1/4W 1/4W	
R044 R046 R051	1-249-433-11 1-249-425-11 1-249-427-11	CARBON CARBON CARBON	22K 4.7K 6.8K 470	5% 1/4W 5% 1/4W 5% 1/4W 5% 1/4W	R418 R419	1-249-417-11 1-249-425-11	CARBON	1 K 4 . 7 K	5% 5%	1/4W 1/4W	
R052 R055		CARBON CARBON	470 470	5% 1/4W 5% 1/4W	R420	1-249-413-11 1-249-409-11 1-249-404-00	CARBON	470 220 82	5%	1/4W 1/4W 1/4W	
R056 R058 R059	1-249-423-11 1-249-429-11 1-249-426-11	CARBON CARBON CARBON	3.3K 10K 5.6K	5% 1/4W 5% 1/4W	R423 R424	1-249-438-11 1-249-437-11	CARBON CARBON	56K 47K		174W 174W	
R060 R061	1-249-417-11	CARBON	1 K	5% 1/4W	R425 R426	1-249-437-11 1-249-405-11 1-247-804-11	CARBON CARBON	47K 100 75	5%%%%%% 5%%%%%%% 5%%%%%%%%%%%%%%%%%%%%	1/4W 1/4W 1/4W	
R063 R064	1-249-413-11 1-249-422-11 1-249-417-11	CARBON CARBON	470 2.7K 1K	5% 1/4W 5% 1/4W	R427	1-249-432-11	CARBON CARBON	18K	5%	1/4W	
R065 R066	1-249-433-11 1-249-425-11	CARBON CARBON	22K 4.7K	5% 1/4W 5% 1/4W	R429 R430 R431	1-249-409-11 1-249-437-11 1-249-441-11	CARBON CARBON CARBON	220 47K 100K	5% 5%	1/4W 1/4W 1/4W	
R070 R071 R072	1-249-429-11 1-249-413-11 1-249-441-11	CARBON CARBON CARBON	10K 470 100K	5% 1/4W 5% 1/4W 5% 1/4W	R432 R434	1-249-437-11	CARBON CARBON	47K 680	5% 5%	1/4W 1/4W	
R073 R074	1-249-435-11 1-249-429-11	CARBON CARBON	33K 10K	5% 1/4W 5% 1/4W	R435 R436 R437	1-249-440-11 1-249-409-11 1-249-429-11	CARBON CARBON CARBON	82K 220 10K	5% 5% 5%	1/4W 1/4W 1/4W	
R075 R076 R077	1-249-431-11 1-249-423-11 1-249-435-11	CARBON CARBON CARBON	15K 3.3K 33K	5% 1/4% 5% 1/4% 5% 1/4%	R444 R445	1-249-411-11 1-216-452-11	CARBON METAL OXIDE	330 180	5% 5%	1/4W 2W	F
R078 R079	1-249-427-11 1-249-429-11	CARBON CARBON	6.8K 10K	5% 1/4W 5% 1/4W	R501 R502 R503	1-249-425 11 1-247-744-11 1-215-867-00	CARBON CARBON METAL OXIDE	4.7K 270 470	5% 5% 5%	174W 172W 1W	
R080	1-249-429-11	CARBON	10K	5% 1/4W	R504	1-247-895-00	CARBON	470K	5% 5%	1/4W	

The components identified by shading and mark A are critical for safety.
Replace only with part number specified.



number specified.					D
REF.NO. PART NO. DESCRIPTION		REMARK REF. NO	D. PART NO.	DESCRIPTION	REMARK
R505 1-249-429-11 CARBON R506 1-249-423-11 CARBON R507 1-249-435-11 CARBON R508 1-216-347-11 METAL OXIDE R509 1-247-893-11 CARBON	10K 5% 1/4W 3.3K 5% 1/4W 33K 5% 1/4W 0.68 5% 1W 390K 5% 1/4W	R855 R856 R857 R858	1-202-830-00 1-217-825-11 1-247-887-00 1-215-882-00	FUSTBLE 8.2K 5% 1/4W CARBON 220K 5% 1/4W	V
R510 - 1-249-439-11 CARBON R511 1-247-891-00 CARBON R513 1-249-424-11 CARBON R551 1-212-883-00 FUSIBLE R552 1-249-419-11 CARBON	68K 5% 1/4W 330K 5% 1/4W 3.9K 5% 1/4W 120 5% 1/4W 1.5K 5% 1/4W	RV401 RV501 RV552	1-238 · 163-11 1 · 238 · 016 · 11	RES. VAR. CARBON 10K RES. ADJ. CARBON 10K RES. ADJ. CARBON 10K RES. ADJ. CARBON 100K	
R553 1-249-426-11 CARBON R554 1-249-404-00 CARBON R555 1-249-423-11 CARBON R556 1-249-418-11 CARBON R558 1-249-417-11 CARBON	5.6K 5% 1/4W 82 5% 1/4W 3.3K 5% 1/4W 1.2K 5% 1/4W 1K 5% 1/4W	RV553 RV801	3 1-238-016-11 1-223-102-00	RES. ADJ. CARBON 10K RES. ADJ. WIREWOUND 120 RES. ADJ. CARBON 47K	
R559 1-249-434-11 METAL R560 1-247-887-00 METAL R561 1-249-412-11 CARBON R562 1-249-432-11 METAL R563 1-249-417-11 CARBON	27K 5% 1/4W 220K 5% 1/4W 390 5% 1/4W 18K 5% 1/4W 1K 5% 1/4W	5001 5002 5003 5004	<pre></pre>	TCH> SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL	
R564 1-249-410-11 CARBON R565 1-215-454-00 METAL R567 1-247-887-00 CARBON R569 1-249-431-11 CARBON R571 1-249-436-11 CARBON	270 5% 1/4W 24K 1% 1/6W 220K 5% 1/4W 15K 5% 1/4W 39K 5% 1/4W	\$005 \$006 \$007 \$008 \$009	1-571-532-21 1-571-532-21 1-571-532-21 1-571-532-21	SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL SWITCH, TACTIL	
R572 1-249-405-11 CARBON R573 1-249-433-11 CARBON R574 1-249-439-11 CARBON R575 1-249-421-11 CARBON R576 1-249-432-11 CARBON	100 5% 1/4W 22K 5% 1/4W 68K 5% 1/4W 2.2K 5% 1/4W 18K 5% 1/4W			RK GAP>	
R601 A 1-205-909-11 WIREWOUND R602 1-214-931-00 CARBON R603 1-215-903-11 METAL OXIDE R604 1-247-750-11 CARBON R605 A 1-247-289-11 CARBON	3.3 5% 10W 560K 5% 1/2W 68K 5% 2W 680 5% 1/2W 8.2M 5% 1W	T603	▲ 1-449-275-12 ▲ 1-421-776-11	LFT	
R606 1-212-877-11 FUSIBLE R608 1-216-449-11 METAL OXIDE R609 1-207-905-00 WIREWOUND R610 1-247-887-00 CARBON R612 1-217-809-91 FUSIBLE	68 5% 1/4W 56 5% 2W 0.27 10% 2W 220K 5% 1/4W 0.33 5% 1/4W	T605 T801		TRANSFORMER, TRIGGER PULSE LFT TRANSFORMER, HORIZONTAL DRIVE TRANSFORMER ASSY, FLYBACK	
R613 1-217-811-91 FUSIBLE R615 1-249-399-11 CARBON R617 1-216-354-11 METAL OXIDE R801 1-217-811-91 FUSIBLE R802 1-205-642-00 WIREWOUND	0.47 5% 1/4W 33 5% 1/4W 2.7 5% 1W 0.47 5% 1/4W 3.3K 10% 5W	F T11601		ERMISTOR>> THERMISTOR (POSITIVE)	1. 1.
R804 1-217-822-91 FUSIBLE R805 1-249-399-11 CARBON R806 1-249-421-11 CARBON R807 1-212-877-11 FUSIBLE R808 1-216-347-11 METAL OXIDE	4.7K 5% 1/4W 33 5% 1/4W 2.2K 5% 1/4W 68 5% 1/4W 0.68 5% 1W	T0101	1 1-463-881-11		20 W 19
R809 1-249-421-11 CARBON R810 1-202-721-00 SOLID R822 1-247-903-00 CARBON R823 1-217-820-91 FUSIBLE R824 1-249-434-11 CARBON	2.2K 5% 1/4W 1.5M 10% 1/2W 1M 5% 1/4W 3.3K 5% 1/4W 27K 5% 1/4W	ř	**************************************	TF BLOCK (IFG-389)	: *** ******
RS26 1-249-430-11 CARBON RS27 1-249-417-11 CARBON RS28 1-249-438-11 CARBON RS29 1-247-883-00 CARBON RS30 1-249-429-11 CARBON	12K 5% 1/4W 1K 5% 1/4W 56K 5% 1/4W 150K 5% 1/4W 10K 5% 1/4W			DEFLECTION YOKE (Y16SXA) MAGNET, DISK; 10MM Ø MAGNET, ROTATABE DISK; 15MM Ø MAGNET, BMC SPEAKER (8CM CONE TYPE)	
R831 1-249-423-11 CARBON R833 1-212-857-00 FUSIBLE R852 1-216-431-11 METAL OXIDE R854 1-217-811-91 FUSIBLE	3.3K 5% 1/4W 10 5% 1/4W 560 5% 1W 0.47 5% 1/4W	L901	∆ . 1-559-824-11	CORD, POWER (WITH CONNECTOR) -	n ji Ash Mar

KV-M16D RM-658

The components identified by shading and mark Aare critical for safety.

Replace only with part number specified.

REF.NO. PART NO.

DESCRIPTION

REMARK

V901 A.8-738-852-05 PICTURE TUBE (A37,JUNIOX)

ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
A-1470-839-A 1-417-154-11 1-501-284-00 3-786-938-11 *4-384-927-01	COMMANDER ASSY (RM-658) MATCHING TRANSFORMER, ANTENNA ANTENNA, TELESCOPIC MANUAL, INSTRUCTION BAG, PROTECTION	
*4-391-427-01 *4-391-428-01 *4-391-429-01	CUSHION (UPPER) (ASSY) CUSHION (LOWER) (ASSY) INDIVIDUAL CARTON	

English